We claim:

1.   A method for scheduling program units, the method comprising:

starting a process within an operating system;

starting a plurality of program units within an operating system, the program units associated with the process; and

upon the occurrence of a context shifting event, synchronizing the scheduling of each of the plurality of program units and setting the context of each of the plurality of program units to process the context shifting event.

2.   The method of claim 1, wherein the program unit comprises a thread.

3.   The method of claim 2, wherein each of the threads are executed on a separate processor.

4.   The method of claim 3, wherein the processors executing the threads reside on at least a first multiple processor unit and a second multiple processor unit, and further comprising migrating threads executing on the second multiple processor unit to the first multiple processor unit.

5.   The method of claim 1, wherein the context shifting event comprises an exception.

6.   The method of claim 5 wherein the exception comprises a signal.

7.   The method of claim 1 wherein the context shifting event comprises a non-local goto.

8.   The method of claim 1, wherein the context shifting event comprises a system call.

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9.   A system for scheduling program units, the system comprising:

at least one multiple processor unit having a plurality of processors;

a memory coupled to the plurality of processors; and

an operating environment executed by at least one of the processors from the memory and operable to perform the tasks of:

start a process,

start a plurality of program units within an operating system, the program units associated with the process, and

upon the occurrence of a context shifting event, synchronize the scheduling of each of the plurality of program units and setting the context of each of the plurality of program units to process the context shifting event.

10.   The system of claim 9, wherein the program unit comprises a thread.

11.   The system of claim 10, wherein each of the threads are executed on a separate processor of the plurality of processors.

12.   The system of claim 11, wherein the processors executing the threads reside on at least a first multiple processor unit and a second multiple processor unit of the at least one multiple processor units, and wherein the operating environment migrates threads executing on the second multiple processor unit to the first multiple processor unit.

13.   The system of claim 9, wherein the context shifting event comprises an exception.

14.   The system of claim 13 wherein the exception comprises a signal.

15.   The system of claim 9 wherein the context shifting event comprises a non-local goto.

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16.   The system of claim 9, wherein the context shifting event comprises a system call.

17.   A computer-readable media having computer-executable instructions for performing a method for scheduling program units, the method comprising:

starting a process within an operating system;

starting a plurality of program units within an operating system, the program units associated with the process; and

upon the occurrence of a context shifting event, synchronizing the scheduling of each of the plurality of program units and setting the context of each of the plurality of program units to process the context shifting event.

18.   The computer-readable media of claim 17, wherein the program unit comprises a thread.

19.   The computer-readable media of claim 18, wherein each of the threads are executed on a separate processor.

20.   The computer-readable media of claim 19, wherein the processors executing the threads reside on at least a first multiple processor unit and a second multiple processor unit, and wherein the method further comprises migrating threads executing on the second multiple processor unit to the first multiple processor unit.

21.   The computer-readable media of claim 17, wherein the context shifting event comprises an exception.

22.   The computer-readable media of claim 21 wherein the exception comprises a signal.

23.   The computer-readable media of claim 17 wherein the context shifting event comprises a non-local goto.

24.   The computer-readable media of claim 17, wherein the context shifting event comprises a system call.